PROGRAMS

INDUSTRIAL SYSTEMS TECHNOLOGY

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair, or install equipment. Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems.

Students will learn multi-craft technical skills in print reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, and includes various diagnostic and repair procedures. Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair, and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

Associate (A50240)

Spring Semester 1		Lec	Lab	Clinic	Credit
ACA-115	Success & Study Skills	0	2	0	1
BPR-135	Schematics & Diagrams	2	0	0	2
ELC-112	DC/AC Electricity	3	6	0	5
ELC-128	Introduction to Programmable Logic Controller	2	3	0	3
ISC-112	Industrial Safety	2	0	0	2
PCI-162	Instrumentation Controls	2	3	0	3
				Total:	16

Summer Semester 1		Lec	Lab	Clinic	Credit	
Math Option	Mathematics Options Listed Below	2-3	0-2	0	3-4	
Communications	Communications Options Listed Below	3	0	0	3	
Option						
				Total:	6-7	

Fall Semester 1		Lec	Lab	Clinic	Credit
ELC-130	Advanced Motors and Controls	2	2	0	3
HYD-110	Hydraulics/Pneumatics I	2	3	0	3
MEC-111	Machine Processes I	1	4	0	3
MNT-110	Introduction to Maintenance Procedures	1	3	0	2
MNT-165	Mechanical Industrial Systems	1	3	0	2
WLD-112	Basic Welding Processes	1	3	0	2
English Options	English Options Listed Below	3	0	0	3
				Total:	18

Consider Companion 2		_	_	_		
Spring Semester 2		Le	_	ab		Credit
ATR-215	Sensors and Transducers	2		3	0	3
ATR-280	Robotic Fundamentals	3		2	0	4
HYD-210	Advanced Hydraulics	1		3	0	2
MNT-220	Rigging and Moving	1		3	0	2 3
Social & Behavioral Option	Social & Behavioral Science Options Listed Below	3	•	0	0	3
benavioral Option					Total:	14
Fall Semester 2		Le	ec La	ab	Clinic	Credit
ELC-215	Electrical Maintenance	2		3	0	3
ELN-275	Troubleshooting	1		3	0	2
MNT-240	Indust Equip Troubleshoot	1		3	0	2
MNT-263	Electrical-Pneumatic Components	2		4	0	4
Humanities Option	Humanities and Fine Arts Options Listed Below	3	;	0	0	3
'	•				Total:	14
			Total C	red	it Hours	s: 68
English: Choose O	ne of the following courses:	Lec	Lab	Cl	inic Cr	edit
ENG-110	Freshman Composition	3	0		0	3
ENG-111	Writing and Inquiry	3	0		0	3
Communications: (Choose One of the following:	Lec	Lab	Cl	inic Cr	edit
COM-120	Intro to Interpersonal Communication	3	0		0	3
COM-231	Public Speaking	3	0		0	3
ENG-112	Writing and Research in the Disciplines	3	0		0	3
Mathematics: Cho	ose at least 3 hours from the following courses:	Lec	Lab	Cl	inic Cr	edit
MAT-110	Mathematical Measurement and Literacy	2	2			3
MAT-143	Quantitative Literacy	2	2		0	3
Social and Behavio	oral Sciences Choices for AAS Degree Programs Unless	Lec	Lab	Cl	inic Cr	edit
ECO-251	Principles of Microeconomics	3	0		0	3
ECO-252	Principles of Macroeconomics	3	0			3
POL-120	American Government	3	0			3
PSY-150	General Psychology	3	0			3
SOC-210	Introduction to Sociology	3	0			3
Humanities/Fine A Otherwise Noted:	rts Choices for AAS Degree Programs Unless	Lec	Lab	Cl	inic Cr	edit
ART-111	Art Appreciation	3	0		0	3
2 Programs —						

d:	Lec	Lab	Clinic Ci	eait
Technology and Society	3	0	0	3
Critical Thinking	3	0	0	3
Music Appreciation	3	0	0	3
0240)				
· 1	Lec	Lal	o Clinio	: Credit
Success & Study Skills	0	2	0	1
Schematics & Diagrams	2	0	0	2
DC/AC Electricity	3	6	0	5
Introduction to Programmable Logic Controller	2	3	0	3
Industrial Safety	2	0	0	2
Instrumentation Controls	2	3	0 Total:	3 16
				Credit
Mathematics Options Listed Below	2	2		3
			Total:	3
	Lec	Lal	o Clinio	Credit
Communication Options Listed Below	3	0	0	3
Advanced Meteorera of Control	2	2	0	2
				3 3
				3
				2
			_	2
				2
Dasic Welding Flocesses	ı	3	Total:	2 18
	To	otal Cr	edit Hou	rs: 37
: Choose One of the following:	Lec	Lab (Clinic Cı	edit
Intro to Interpersonal Communication	3	0	0	3
Public Speaking	3	0	0	3
, -	3	0	0	3
Writing and Inquiry	3	0	0	3
noose at least 3 hours from the following courses:	Lec	Lab (Clinic Cı	edit
	2		0	3
Quantitative Literacy	2	2	0	3
	Technology and Society Critical Thinking Music Appreciation D240) 1 Success & Study Skills Schematics & Diagrams DC/AC Electricity Introduction to Programmable Logic Controller Industrial Safety Instrumentation Controls 1 Mathematics Options Listed Below Communication Options Listed Below Advanced Motors and Controls Hydraulics/Pneumatics I Machine Processes I Introduction to Maintenance Procedures Mechanical Industrial Systems Basic Welding Processes 1: Choose One of the following: Intro to Interpersonal Communication Public Speaking Freshman Composition Writing and Inquiry Dioose at least 3 hours from the following courses: Mathematical Measurement and Literacy	d: Technology and Society Critical Thinking Music Appreciation 3 D2440) 1 Lec Success & Study Skills Schematics & Diagrams DC/AC Electricity Introduction to Programmable Logic Controller Industrial Safety Instrumentation Controls 2 Industrial Safety Instrumentation Controls 2 Instrumentation Controls 2 Lec Communication Options Listed Below Advanced Motors and Controls 2 Hydraulics/Pneumatics I Machanical Industrial Systems Basic Welding Processes 1 Introduction to Maintenance Procedures Mechanical Industrial Systems Basic Welding Processes 1 Tectors 1 Choose One of the following: Intro to Interpersonal Communication Public Speaking Freshman Composition Writing and Inquiry 1 Speech State S	Technology and Society Critical Thinking Music Appreciation 1	Technology and Society

Humanities/Fine Arts Choices for AAS Degree Programs Unless

Lec Lab Clinic Credit

Certificate (C50240)

Spring Semester 1		Lec	Lab	Clinic	Credit
BPR-135	Schematics & Diagrams	2	0	0	2
ELC-112	DC/AC Electricity	3	6	0	5
ELC-128	Introduction to Programmable Logic Controller	2	3	0	3
ISC-112	Industrial Safety	2	0	0	2
PCI-162	Instrumentation Controls	2	3	0	3
				Total:	15

Total Credit Hours: 15